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SEQUENCE LISTING

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<120> COMPOUNDS AND METHODS FOR MODULATING ACTIVATION OF
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<140> US

<141> 1998-12-10

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<170> PatentIn Ver. 2.0

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Gly Leu Lys Lys Glu Arg Leu Leu Asp Asp Arg His Asp Ala Gly Leu
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Asp Ala Met Lys Asp Glu Glu Tyr Glu Gln Met Val Lys Glu Leu Gln
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Glu Ile Arg Leu Glu Pro Gln Glu Val Pro Arg Gly Ser Glu Pro Trp
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Lys Gln Gln Leu Thr Glu Asp Gly Asp Ser Phe Leu His Leu Ala Ile
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Ile His Glu Glu Lys Ala Leu Thr Met Glu Val Ile Arg Gln Val Lys
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Gly Asp Leu Ala Phe Leu Asn Phe Gln Asn Asn Leu Gln Gln Thr Pro
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Leu His Leu Ala Val Ile Thr Asn Gln Pro Glu Ile Ala Glu Ala Leu
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Leu Gly Ala Gly Cys Asp Pro Glu Leu Arg Asp Phe Arg Gly Asn Thr
 165 170 175

Pro Leu His Leu Ala Cys Glu Gln Gly Cys Leu Ala Ser Val Gly Val
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Leu Thr Gln Ser Cys Thr Thr Pro His Leu His Ser Ile Leu Lys Ala
 195 200 205

Thr Asn Tyr Asn Gly His Thr Cys Leu His Leu Ala Ser Ile His Gly
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Tyr Leu Gly Ile Val Glu Leu Leu Val Ser Leu Gly Ala Asp Val Asn
 225 230 235 240

Ala Gln Glu Pro Cys Asn Gly Arg Thr Ala Leu His Leu Ala Val Asp
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Leu Gln Asn Pro Asp Leu Val Ser Leu Leu Leu Lys Cys Gly Ala Asp
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Val Asn Arg Val Thr Tyr Gln Gly Tyr Ser Pro Tyr Gln Leu Thr Trp

275

280

285

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Glu Asn Leu Gln Met Leu Pro Glu Ser Glu Asp Glu Glu Ser Tyr Asp
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Ser Gly Leu Gly Ser Leu Gly Pro Asp Ala Ala Ala Pro Gly Gly Pro
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Gly Leu Gly Ala Glu Leu Gly Pro Glu Leu Ser Trp Ala Pro Leu Val
 65 70 75 80

Phe Gly Tyr Val Thr Glu Asp Gly Asp Thr Ala Leu His Leu Ala Val
 85 90 95

Ile His Gln His Glu Pro Phe Leu Asp Phe Leu Leu Gly Phe Ser Ala
 100 105 110

Gly His Glu Tyr Leu Asp Leu Gln Asn Asp Leu Gly Gln Thr Ala Leu
 115 120 125

His Leu Ala Ala Ile Leu Gly Glu Ala Ser Thr Val Glu Lys Leu Tyr
 130 135 140

Ala Ala Gly Ala Gly Val Leu Val Ala Glu Arg Gly Gly His Thr Ala
 145 150 155 160

Leu His Leu Ala Cys Arg Val Arg Ala His Thr Cys Ala Cys Val Leu
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195	200	205		
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Asp Trp Arg Leu Gln Leu Glu Ala Glu Asn Tyr Asp Gly His Thr Pro	225	230	235	240
Leu His Val Ala Val Ile His Lys Asp Ala Glu Met Val Arg Leu Leu	245	250	255	
Arg Asp Ala Gly Ala Asp Leu Asn Lys Pro Glu Pro Thr Cys Gly Arg	260	265	270	
Thr Pro Leu His Leu Ala Val Glu Ala Gln Ala Ala Ser Val Leu Glu	275	280	285	
Leu Leu Leu Lys Ala Gly Ala Asp Pro Thr Ala Arg Met Tyr Gly Gly	290	295	300	
Arg Thr Pro Leu Gly Ser Ala Leu Leu Arg Pro Asn Pro Ile Leu Ala	305	310	315	320
Arg Leu Leu Arg Ala His Gly Ala Pro Glu Pro Glu Asp Glu Asp Asp	325	330	335	
Lys Leu Ser Pro Cys Ser Ser Gly Ser Asp Ser Asp Ser Asp Asn	340	345	350	
Arg Asp Glu Gly Asp Glu Tyr Asp Asp Ile Val Val His Ser Gly Arg	355	360	365	
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<400> 16
 Met Glu Pro Asp Ser Val Ile Glu Asp Lys Thr Ile Glu Leu Met Cys
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Ser Val Pro Arg Ser Leu Trp Leu Gly Cys Ala Asn Leu Val Glu Ser
 20 25 30

Met Cys Ala Leu Ser Cys Leu Gln Ser Met Pro Ser Val Arg Cys Leu
 35 40 45

Gln Ile Ser Asn Gly Thr Ser Ser Val Ile Val Ser Arg Lys Arg Pro
 50 55 60

Ser Glu Gly Asn Tyr Gln Lys Glu Lys Asp Leu Cys Ile Lys Tyr Phe
 65 70 75 80

Asp Gln Trp Ser Glu Ser Asp Gln Val Glu Phe Val Glu His Leu Ile
 85 90 95

Ser Arg Met Cys His Tyr Gln His Gly His Ile Asn Ser Tyr Leu Lys
 100 105 110

Pro Met Leu Gln Arg Asp Phe Ile Thr Ala Leu Pro Glu Gln Gly Leu
 115 120 125

Asp His Ile Ala Glu Asn Ile Leu Ser Tyr Leu Asp Ala Arg Ser Leu
 130 135 140

Cys Ala Ala Glu Leu Val Cys Lys Glu Trp Gln Arg Val Ile Ser Glu
 145 150 155 160

Gly Met Leu Trp Lys Lys Leu Ile Glu Arg Met Val Arg Thr Asp Pro
 165 170 175

Leu Trp Lys Gly Leu Ser Glu Arg Arg Gly Trp Asp Gln Tyr Leu Phe
 180 185 190

Lys Asn Arg Pro Thr Asp Gly Pro Pro Asn Ser Phe Tyr Arg Ser Leu
 195 200 205

Tyr Pro Lys Ile Ile Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg
 210 215 220
 Cys Gly Arg His Asn Leu Gln Arg Ile Gln Cys Arg Ser Glu Asn Ser
 225 230 235 240
 Lys Gly Val Tyr Cys Leu Gln Tyr Asp Asp Glu Lys Ile Ile Ser Gly
 245 250 255
 Leu Arg Asp Asn Ser Ile Lys Ile Trp Asp Lys Thr Ser Leu Glu Cys
 260 265 270
 Leu Lys Val Leu Thr Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr
 275 280 285
 Asp Glu Arg Val Ile Val, Thr Gly Ser Ser Asp Ser Thr Val Arg Val
 290 295 300
 Trp Asp Val Asn Thr Gly Glu Val Leu Asn Thr Leu Ile His His Asn
 305 310 315 320
 Glu Ala Val Leu His Leu Arg Phe Ser Asn Gly Leu Met Val Thr Cys
 325 330 335
 Ser Lys Asp Arg Ser Ile Ala Val Trp Asp Met Ala Ser Ala Thr Asp
 340 345 350
 Ile Thr Leu Arg Arg Val Leu Val Gly His Arg Ala Ala Val Asn Val
 355 360 365
 Val Asp Phe Asp Asp Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr
 370 375 380
 Ile Lys Val Trp Ser Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn
 385 390 395 400
 Gly His Lys Arg Gly Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val
 405 410 415
 Val Ser Gly Ser Ser Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys
 420 425 430
 Gly Ala Cys Leu Arg Val Leu Glu Gly His Glu Glu Leu Val Arg Cys
 435 440 445
 Ile Arg Phe Asp Asn Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys
 450 455 460
 Ile Lys Val Trp Asp Leu Gln Ala Ala Leu Asp Pro Arg Ala Pro Ala
 465 470 475 480
 Ser Thr Leu Cys Leu Arg Thr Leu Val Glu His Ser Gly Arg Val Phe
 485 490 495
 Arg Leu Gln Phe Asp Glu Phe Gln Ile Ile Ser Ser Ser His Asp Asp

500

505

510

Thr Ile Leu Ile Trp Asp Phe Leu Asn Val Pro Pro Ser Ala Gln Asn
515 520 525

u Thr Arg Ser Pro Ser Arg Thr Tyr Thr Tyr Ile Ser Arg
530 535 540

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<213> *Homo sapiens*

<210> 18
<211> 56
<212> PR

<213> Homo sapiens

<400> 18

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1															15

Asn	Ser	Ser	Glu	Arg	Glu	Asp	Cys	Asn	Asn	Gly	Glu	Pro	Pro	Arg	Lys
															30
															30
20															
20															
25															

Ile	Ile	Pro	Glu	Lys	Asn	Ser	Leu	Arg	Gln	Thr	Tyr	Asn	Ser	Cys	Ala
															45
															45
35															
35															
40															

Arg	Leu	Cys	Leu	Asn	Gln	Glu	Thr	Val	Cys	Leu	Ala	Ser	Thr	Ala	Met
															60
															60
50															
50															
55															

Lys	Thr	Glu	Asn	Cys	Val	Ala	Lys	Thr	Lys	Leu	Ala	Asn	Gly	Thr	Ser
															80
															80
65															
65															
70															

Ser	Met	Ile	Val	Pro	Lys	Gln	Arg	Lys	Leu	Ser	Ala	Ser	Tyr	Glu	Lys
															95
															95
85															
85															
90															

Glu	Lys	Glu	Leu	Cys	Val	Lys	Tyr	Phe	Glu	Gln	Trp	Ser	Glu	Ser	Asp
															110
															110
100															
100															
105															

Gln	Val	Glu	Phe	Val	Glu	His	Leu	Ile	Ser	Gln	Met	Cys	His	Tyr	Gln
															125
															125
115															
115															
120															

His	Gly	His	Ile	Asn	Ser	Tyr	Leu	Lys	Pro	Met	Leu	Gln	Arg	Asp	Phe
															140
															140
130															
130															
135															

Ile	Thr	Ala	Leu	Pro	Ala	Arg	Gly	Leu	Asp	His	Ile	Ala	Glu	Asn	Ile
															160
															160
145															
145															
150															

Leu	Ser	Tyr	Leu	Asp	Ala	Lys	Ser	Leu	Cys	Ala	Ala	Glu	Leu	Val	Cys
															175
															175
165															
165															
170															

Lys	Glu	Trp	Tyr	Arg	Val	Thr	Ser	Asp	Gly	Met	Leu	Trp	Lys	Lys	Leu
															190
															190
180															
180															
185															

Ile	Glu	Arg	Met	Val	Arg	Thr	Asp	Ser	Leu	Trp	Arg	Gly	Leu	Ala	Glu
															205
															205
195															
195															
200															

Arg	Arg	Gly	Trp	Gly	Gln	Tyr	Leu	Phe	Lys	Asn	Lys	Pro	Pro	Asp	Gly
															220
															220
210															
210															
215															

Asn	Ala	Pro	Pro	Asn	Ser	Phe	Tyr	Arg	Ala	Leu	Tyr	Pro	Lys	Ile	Ile
															240
															240
225															
225															
230															

Gln	Asp	Ile	Glu	Thr	Ile	Glu	Ser	Asn	Trp	Arg	Cys	Gly	Arg	His	Ser
															255
															255
245															
245															
250															

Leu	Gln	Arg	Ile	His	Cys	Arg	Ser	Glu	Thr	Ser	Lys	Gly	Val	Tyr	Cys
															270
															270
260															
260															
265															

Leu	Gln	Tyr	Asp	Asp	Gln	Lys	Ile	Val	Ser	Gly	Leu	Arg	Asp	Asn	Thr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

275	280	285
Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu Cys Lys Arg Ile Leu Thr		
290	295	300
Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr Asp Glu Arg Val Ile		
305	310	315
Ile Thr Gly Ser Ser Asp Ser Thr Val Arg Val Trp Asp Val Asn Thr		
325	330	335
Gly Glu Met Leu Asn Thr Leu Ile His His Cys Glu Ala Val Leu His		
340	345	350
Leu Arg Phe Asn Asn Gly Met Met Val Thr Cys Ser Lys Asp Arg Ser		
355	360	365
Ile Ala Val Trp Asp Met Ala Ser Pro Thr Asp Ile Thr Leu Arg Arg		
370	375	380
Val Leu Val Gly His Arg Ala Ala Val Asn Val Val Asp Phe Asp Asp		
385	390	395
400		
Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr Ile Lys Val Trp Asn		
405	410	415
Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn Gly His Lys Arg Gly		
420	425	430
Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val Val Ser Gly Ser Ser		
435	440	445
Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys Gly Ala Cys Leu Arg		
450	455	460
Val Leu Glu Gly His Glu Glu Leu Val Arg Cys Ile Arg Phe Asp Asn		
465	470	475
480		
Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys Ile Lys Val Trp Asp		
485	490	495
Leu Val Ala Ala Leu Asp Pro Arg Ala Pro Ala Gly Thr Leu Cys Leu		
500	505	510
Arg Thr Leu Val Glu His Ser Gly Arg Val Phe Arg Leu Gln Phe Asp		
515	520	525
Glu Phe Gln Ile Val Ser Ser Ser His Asp Asp Thr Ile Leu Ile Trp		
530	535	540
Asp Phe Leu Asn Asp Pro Ala Ala Gln Ala Glu Pro Pro Arg Ser Pro		
545	550	555
560		
Ser Arg Thr Tyr Thr Tyr Ile Ser Arg		
565		

<210> 19
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<400> 19
Asp Ser Gly Leu Asp Ser
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<210> 20
<211> 20
<212> PRT
<213> Homo sapiens

<400> 20
Ala Ala Val Asn Val Val Asp Phe Asp Asp Lys Tyr Ile Val Ser Ala
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Ser Gly Asp Arg
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<210> 21
<211> 17
<212> PRT
<213> Homo sapiens

<400> 21
Glu Leu Phe Pro Leu Ile Phe Pro Ala Glu Pro Ala Gln Ala Ser Gly
1 5 10 15

Pro

<210> 22
<211> 10
<212> PRT
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<220>
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<222> (6)
<223> PHOSPHORYLATION

<220>
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<222> (10)
<223> PHOSPHORYLATION

<400> 22
Cys Asp Arg His Asp Ser Gly Leu Asp Ser

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5

10

<210> 23
<211> 4
<212> PRT
<213> Homo sapiens

<400> 23
Val Val Asn Val
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<210> 24
<211> 17
<212> PRT
<213> Homo sapiens

<400> 24
Ala Ala Val Asn Val Val Asp Phe Asp Asp Lys Tyr Ile Val Ser Ala
1 5 10 15
Ser

<210> 25
<211> 9
<212> PRT
<213> Homo sapiens

<400> 25
Leu Glu Gly His Glu Glu Leu Val Arg
1 5

<210> 26
<211> 12
<212> PRT
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<400> 26
Leu Val Val Ser Gly Ser Ser Asp Asn Thr Ile Arg
1 5 10

<210> 27
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<212> PRT
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<400> 27
Ile Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg
1 5 10

<210> 28
<211> 9
<212> PRT
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<400> 28
Val Ile Ser Glu Gly Met Leu Trp Lys
1 5

<210> 29
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<212> PRT
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<220>
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<223> PHOSPHORYLATION

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<223> PHOSPHORYLATION

<400> 29
Asp Arg His Asp Ser Gly Leu Asp Ser Met
1 5 10

<210> 30
<211> 6
<212> PRT
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<220>
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<222> (2)
<223> PHOSPHORYLATION

<220>
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<223> PHOSPHORYLATION

<400> 30
Asp Ser Gly Leu Asp Ser
1 5